WHAT IS CLAIMED IS:

	1. A method of cre	eating a desired ta	rget object based	l on one or more	pre-existing
parent o	objects, the method	comprising:			

performing a finding operation to find the target object in terms of each of the parent objects; and

performing a building operation to obtain a combined transformation based on the parent objects;

wherein the target object is created by the combined transformation of the parent objects.

- 2. The method of creating a desired target object of claim 1, wherein the target object is a point and the one or more pre-existing parent objects comprise a vector and a point.
- 3. The method of creating a desired target object of claim 2, wherein the building operation comprises a summation.
- 4. The method of creating a desired target object of claim 1, wherein the target object is a vector and the one or more pre-existing parent objects comprise plural vectors.
- 5. The method of creating a desired target object of claim 4, wherein the building operation comprises a vector operation.
- 6. The method of creating a desired target object of claim 1, wherein the target object is a vector and the one or more pre-existing parent objects are selected from the group consisting of: a single point and a single vector.

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1	7. The method of creating a desired target object of claim 6, wherein the building
2	operation comprises a derivative operation.
1	8. The method of creating a desired target object of claim 1, wherein the target
2	object is a vector and the one or more pre-existing parent objects comprise plural points.
1	9. The method of creating a desired target object of claim 8, wherein the building
2	operation comprises a difference operation.
1	10. The method of creating a desired target object of claim 1, wherein the target
2	object is a set of orthogonal axes and the one or more pre-existing parent objects comprise
3	plural vectors.
1	11. The method of creating a desired target object of claim 10, wherein the
2	building operation comprises an alignment operation.
1	The method of creating a desired target object of claim 1, wherein the target
2	object is a coordinate system and the one or more pre-existing parent objects comprise a
3	point and a set of orthogonal axes.
1	13. The method of creating a desired target object of claim 12, wherein the
2	building operation comprises an assembly operation.

14. A computer system adapted for creating a desired target object based on one

or more pre-existing parent objects, the system comprising:

a processor;

4	a memory, addressable by the processor, including software instructions adapted
5	to enable the computer system to perform the steps of:
6	performing a finding operation to find the target object in terms of each of the
7	parent objects; and
8	performing a building operation to obtain a combined transformation based on
9	the parent objects;
10	wherein the target object is created by the combined transformation of the parent
11	objects.
1	15. The computer system of claim 14, wherein the target object is a coordinate
2	system and the one or more pre-existing parent objects comprise a point and a set of
3	orthogonal axes.
1	16. The computer system of claim 15, wherein the building operation comprises an
2	assembly operation.
1	17. A computer program product for enabling a computer to create a desired
2	target object based on one or more pre-existing parent objects, the computer program
3	product comprising:
4	software instructions for enabling the computer to perform predetermined
5	operations, and
6	a computer readable medium embodying the software instructions;
7	the predetermined operations including the steps of:
8	performing a finding operation to find the target object in terms of each of the
9	parent objects; and

10	performing a building operation to obtain a combined transformation based on
11	the parent objects;
12	wherein the target object is created by the combined transformation of the parent
13	objects.
1	18. The computer program product of claim 17, wherein the target object is a
2	coordinate system and the one or more pre-existing parent objects comprise a point and a
3	set of orthogonal axes.
1	19. The computer program product of claim 18, wherein the building operation comprises an assembly operation.
1	20. A method of creating a desired target object based on a pre-existing parent
2	object and on information explicitly provided by a user, the method comprising:
3	performing a finding operation to find the target object in terms of the parent
4	object, using the information explicitly provided by the user, to obtain a first
5	transformation;
6	performing a finding operation to find the parent object with respect to the target
7	object, to obtain a second transformation; and
8	combining the first and second transformations to create the target object.
1	21. A computer system adapted for creating a desired target object based on a pre-
2	existing parent object and on information explicitly input by a user, the system
3	comprising:
4	a processor;

5	a memory, addressable by the processor, including software instructions adapted
6	to enable the computer system to perform the steps of:
7	performing a finding operation to find the target object in terms of the parent
8	object, using the information explicitly provided by the user, to obtain a
9	first transformation;
10	performing a finding operation to find the parent object with respect to the
11	target object, to obtain a second transformation; and
12	combining the first and second transformations to create the target object.
1	22. A computer program product for enabling a computer to create a desired
2	target object based on a pre-existing parent object and on information explicitly input by a
3	user, the computer program product comprising:
4	software instructions for enabling the computer to perform predetermined
5	operations, and
6	a computer readable medium embodying the software instructions;
7	the predetermined operations including the steps of:
8	performing a finding operation to find the target object in terms of the parent
9	object, using the information explicitly provided by the user, to obtain a
10	first transformation;
11	performing a finding operation to find the parent object with respect to the
12	target object, to obtain a second transformation; and
13	combining the first and second transformations to create the target object.